



## Elevation Saved Family Home from Hurricane Ike

### Full Mitigation Best Practice Story

#### *Galveston County, Texas*

**Kemah, TX** - Paul Strizek's home on Galveston Bay is much more than just a house. For more than 50 years, his bayside cottage has been at the center of the most important of his family memories, and it was his mother's house. So it was worth it to Strizek to have the home elevated onto concrete columns in the 1990s. "It cost some money," he said, "but I didn't want to lose that house."



His investment paid off September 13, 2008 when Hurricane Ike stormed ashore over Galveston Island just 20 miles south of Strizek's house. The Category 2 hurricane carried winds up to 125 miles per hour (mph), driving storm surge up the bay. Wind and water assaulted its colorful tourist shops, blue-striped lighthouse water tower, lavish restaurants, festive boardwalk, and 3,200-foot roller coaster.

The storm surge took down Strizek's steps, a dock, and the lower level's breakaway walls. All were carried out to sea. But the house survived, in excellent shape. However, many of his neighbors' houses were shattered. Two homes away, the surge swept an unelevated bay house out to sea.

He thinks the surge reached 12 feet at his house. The piers hold the house up 14 feet. "If I hadn't raised that house, it would be gone," Strizek said. A concrete sea wall that Strizek built after Tropical Storm Frances in 1998 helped curb erosion and dissipate wave energy. In addition, the windows were boarded up before the storm.

Despite the risk of facing the wind and sea on Galveston Bay, his house matters to Strizek in part because of the pervasive charm of the area. The site of Strizek's home, with its sweeping blue-green vistas of the bay and prime access at the Clear Creek outlet, is irresistible.

Strizek knows that Hurricane Ike is not the first or the last storm to hit Kemah, whose name is derived from an Indian word that means "facing the wind" and is home to nearly 2,300 residents. The specific town was founded in 1898 for railroad expansion. Two years later, it was leveled by the 1900 Galveston hurricane, one of the worst disasters in U.S. history. The town was virtually destroyed again by Hurricane Carla in 1961.

Another reason for Strizek's attachment is the house itself. "This house was built around 1919, as far as we have been able to determine," he said. "The materials and workmanship are superb." The inside was finished with old-growth East Texas pine, a wood considered to be of exceptional building quality.

The house is also Strizek's link with his past and his mother, Jane Strizek.

"My mother bought this house in 1963 as our summer home. Then we moved here full time in 1966, and I went to high school here. It was a sleepy little town then, with a drawbridge where the highway bridge is now. The house was low, on the ground, an old bay house on short pilings maybe three feet into the ground. I could crawl under it. She named it 'The Ark.'

"Lots of the bay houses were like that then. And a lot of them washed away in Carla. I have a picture of mother's house from 1961, undermined and heavily damaged. But somehow it has survived, all these years, all these storms," Strizek said.

His mother lived there until her death in 1993. "My only brother and I were there with her when she passed away, in her own house, in her own bed, in her sleep," he said. Since then, his brother died, too. "I will never let that house go," Strizek said.

In 1994 Strizek renovated the house extensively. "It would have been easier to tear it down and start over than to rebuild it up," he said. "But because of my emotional ties to the house, I wanted to save everything we could. My contractor and I tried to save the historical aspects of it. Any time he had to remove any of the East Texas pine, he saved it and used it to make new molding."

The contractor has lived in the area all his life and knows the challenges. He brought in a structural engineer to design the concrete piers, which drive down two feet below the ground, rest in a 2.5-foot concrete pier foundation, and lift the house up 14

feet. The lower level was fitted with breakaway walls. "That means that the nails that were put into the concrete and the connections between the studs and the piers are all built to minimum standards – built to give way in a storm. We knew not to store anything of value there. It's all built to be sacrificed to the storm, and it was," Strizek said.

Gregory Pekar, the Texas state hazard mitigation officer, said that we can all learn from construction of older homes like Strizek's. "Time and time again across the state, we see that pre-World War II homes, built of full-sized timbers and typically with solid three-quarter-inch wood siding inside and out, are really quite strong. These days, we use lightweight materials and well-enforced building codes to help our homes withstand the strong coastal winds."

"Elevating the house wasn't cheap," Strizek said. "I spent about \$175,000 on the renovation, all told, and probably \$30,000 to \$35,000 of that cost was for raising the house. I think elevation was required for me to get a building permit at that time – I'm not sure – but I knew I was going to do it, whether it was required or not, because I didn't want to lose this house."

Strizek sees some others trying to cut corners in rebuilding and arguing against government building codes. "But the truth is those regulations are for a good purpose," he said. "I would hope that anybody that is on the ground now and thinking about rebuilding will go up on their own or will be required to do so."

"For me, I knew that elevation was worth the money to me to protect my investment. I knew the only way to go was up."

#### Activity/Project Location

Geographical Area: **Single County in a State**

FEMA Region: **Region VI**

State: **Texas**

County: **Galveston County**

City/Community: **Kemah**

#### Key Activity/Project Information

Sector: **Private**

Hazard Type: **Hurricane/Tropical Storm**

Activity/Project Type: **Flood Insurance**

Structure Type: **Wood Frame**

Activity/Project Start Date: **01/1994**

Activity/Project End Date: **Ongoing**

Funding Source: **Homeowner**

#### Activity/Project Economic Analysis

Cost: **\$62,130.00 (Estimated)**

Non FEMA Cost:

### Activity/Project Disaster Information

Mitigation Resulted From Federal  
Disaster? **No**

Value Tested By Disaster? **Yes**

Tested By Federal Disaster #: **1791 , 09/13/2008**

Repetitive Loss Property? **Unknown**

### Reference URLs

No URLs were submitted

### Main Points

- Estimated cost of elevation and hazard mitigation work: \$35,000 in 1994.
- Estimated savings from Hurricane Ike: \$146,000 (Estimated cost to rebuild house)



Paul Strizek and his house at Kemah



Gone with the storm